



A MINI TRAINING SESSION FOR INJURY PREVENTION

Quick Take on Safety

Vehicle Ergonomics

TRAINING OVERVIEW AND OBJECTIVES

- Overview:** Covers ergonomic considerations before driving, seat and other adjustments, entering/exiting vehicles, and when working in a vehicle to minimize ergonomic injuries.
- Purpose:** Inform and encourage employees to understand how small adjustments and awareness can improve ergonomics and minimize injuries.
- Preparation:** Read and become familiar with this Quick Take. *Change as needed to reflect procedures and personnel in your department.*
- Handouts:** Quick Review of Safety—Vehicle Ergonomics
- Notes:** Often vehicles lack the adjustments to create a better ergonomic fit. Consider examining fleet vehicles for available adjustments prior to conducting this training. If adjustment options are not available, encouraging staff to take frequent breaks may be beneficial

SCRIPT TEXT

Vehicle Ergonomics

Ergonomics is the science of adapting a workstation, process or equipment to an individual to prevent injuries, errors and discomfort. These principles also apply to vehicles. Using ergonomic principles when in the vehicle can create more comfort and help to reduce the risk of strains or other injuries that could occur over time.

If muscles or tendons are injured, you are much more likely to reinjure the area in the future. Fortunately, with a focus on ergonomics, many of these injuries can be prevented, so pay careful attention. Your health and safety is important to us; we don't want you to get hurt.

Prevention

One of the most important elements of ergonomics involves an awareness of neutral postures. Neutral postures are those that improve natural support while placing minimal stress on the body and joints. We will focus on neutral postures and positions while driving or working in a vehicle. Think about how you can adopt these best practices.

Before Driving

- Routinely clean your windshield on the inside and outside to ensure a clear view.
- Remove items from pockets, or shift them to front pockets to minimize contact stress as items press into the body.
- Position items used during the drive nearer to you to reduce unnecessary reaching.

- Buckle up and ensure the seat belt is comfortable, secure and in good condition. [*Instructor Note:* Uncomfortable seat belts can occasionally be corrected by the addition of seat belt cushions.]

SEAT ADJUSTMENTS

- Raise the seat as high as possible to improve visibility but maintain head room and make sure your feet can reach the pedals easily.
- Adjust the back tilt to support your back fully. Try setting the seat back at an angle between 100 and 110 degrees.
- Adjust the seat pan or cushion depth to bring the tailbone as far back into the seat as possible.
 - You should be able to place two to three fingers between the back of the knee and the front of the seat. If this is not possible due to a large seat, consider adding a pillow or back cushion to move yourself forward while still providing support for the lower back.
- The seat pan tilt should fully support your thighs and upper legs; avoid keeping the chair so low you're your knees are elevated above the hips.
- After raising the seat, readjust the mirrors as necessary to minimize blind spots. You should only need to turn your head rather than twist or lean to view the mirrors easily.
- Adjust the head rest to bring the top of it level with the top of your head.
- Adjust the steering wheel for height or tilt so the center is between 10 and 12 inches from your breast bone, and your arms, wrists and shoulders are comfortable.

Entering/Exiting Vehicles

- Always use hand holds or rails when entering or exiting vehicles if equipped.
- Maintain three points of contact. [*Instructor Prompt:* Ask the group what is meant by “three points of contact.” Answer: Two hands and a foot or two feet and one hand are always in contact with the vehicle or ground.]
- Avoid jumping out of vehicles.
- Be particularly cautious when stepping on ice and snow, and keep your hands free.

While Driving

- Although current best practice is to hold your hands at the seven and five position, shift hand postures on the steering wheel frequently while maintaining two hands on the wheel.
- Take frequent breaks, particularly on longer drives. Get up and walk around the car or do some stretching exercises to help improve circulation and activity of the muscles.

Working in the Vehicle

If you must work in the vehicle:

- Do not work when it is in motion.
- Avoid working from the driver's seat, as it offers the least amount of room.
- Avoid setting laptop or materials in an adjacent seat and working sideways. Keep your work close in front of you.
- Do not work more than 10-15 minutes at a time when working in a car.
- Use rear seats for longer tasks and more space.
- When using mobile phones, the car should be legally parked for more than one touch operations. When making calls, the phone should be in hands-free operation. [*Instructor Note:* This may be a good opportunity to discuss hands-free cell phone use policy or procedures.]
- Do not use your head or neck to hold a phone to your shoulder.
- Keep commonly used items or notes close to the body.
- Change positions and take frequent breaks.

DISCUSSION QUESTIONS

- How else can we improve vehicle ergonomics?



Vehicle Ergonomics Session

Planning and Review

Trainer

Training
Date

Department(s)

TRAINING GOALS

- Employees are informed and educated about vehicle ergonomics best practices.
- Employees make adjustments to their vehicles to prevent injuries.

RESOURCES

- “Driving Ergonomics,” United States Department of Agriculture, Animal and Plant Health Inspection Service, APHIS.usda.gov/
- “Driving and Ergonomics,” Canadian Centre for Occupational Health and Safety (CCOHS), CCOHS.ca
- “Vehicle Ergonomics Best Practices,” Minnesota Counties Intergovernmental Trust, MCIT.org/resource/
- “Workplace Stretches,” Minnesota Counties Intergovernmental Trust, MCIT.org/resource/

REVIEW

Did the training meet the stated goals?

How can the training be improved?

TRAINER COMMENTS

